



NAVAL FUTURE FORCE

SCIENCE AND TECHNOLOGY EXPO

Technology Insertion Program for Savings (TIPS)

4 February 2015

Margaret Marafino- ONR 03T
TIPS Program Manager
703-696-9774



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Technology Insertion Program for Savings (TIPS) Overview

Objective:

- Transitions applicable commercial off-the-shelf solutions and late-stage development technologies into DoN acquisition programs to significantly reduce operations and maintenance support costs
 - \$ bridge gap between S&T and Acquisition until Program of Record can fund the completion of the technology insertion

Program Criteria:

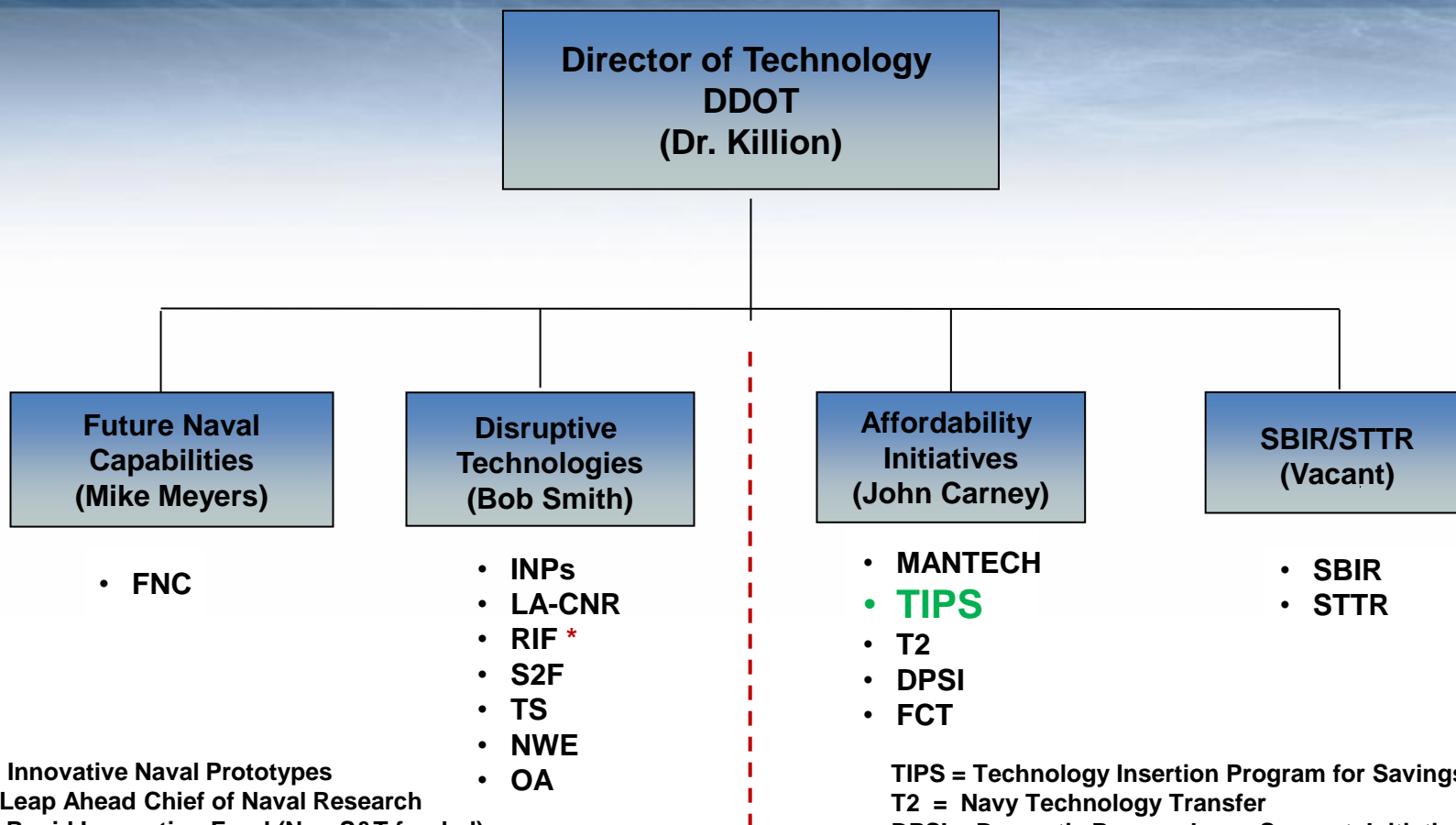
- Addresses a Navy or USMC need
- Increases cost efficiency in maintenance, training, or logistics
 - Must have a positive ROI
- Requires no more than \$2M TIPS funding
- Technology can transition in 24 months or less
- Technology Maturity (TRL): Starting: ≥ 6 Ending: ≥ 8
- Technology has program and fiscal support (OPNAV / HQMC P&R)
- Solution can be supported by Navy/USMC infrastructure and policy

Funding (\$K):

	FY14	FY15	FY16	FY17
Pres Bud 15 (Actual)	8,436	8,480	18,632	19,867



Organizational Placement



INP = Innovative Naval Prototypes
LA = Leap Ahead Chief of Naval Research
RIF = Rapid Innovation Fund (Non S&T funded)
S2F= Speed to Fleet
TS= Tech Solutions
NWE= Naval Warfare Experimentation
OA = Operational Analysis

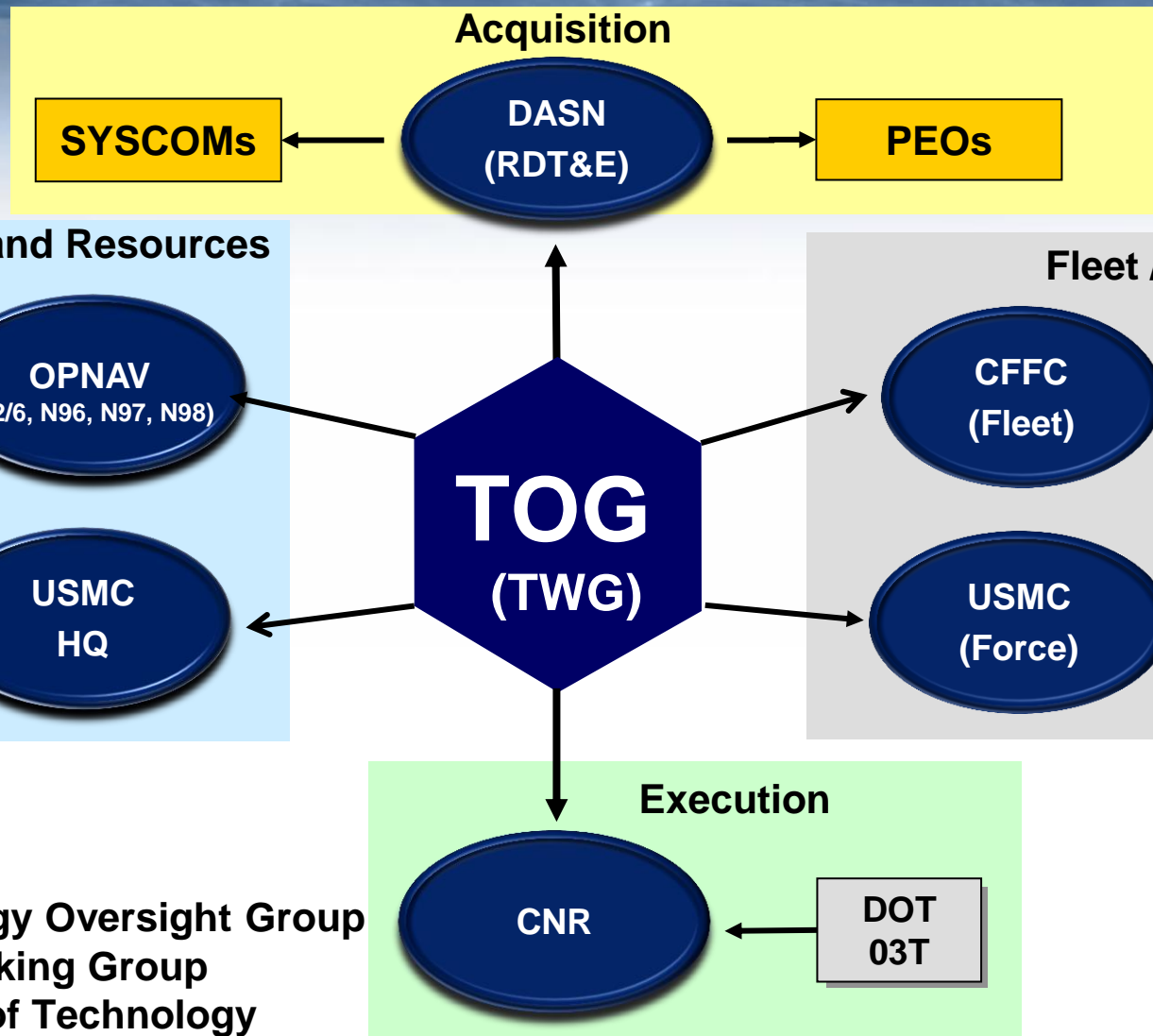
TIPS = Technology Insertion Program for Savings
T2 = Navy Technology Transfer
DPSI = Domestic Preparedness Support Initiative
FCT = Foreign Comparative Test
MANTECH= Manufacturing Technology
SBIR = Small Business Innovation Research
STTR = Small Business Technology Transfer

S&T Funding

NON S&T Funding



TIPS Governance



TOG = Technology Oversight Group
 TWG = TIPS Working Group
 DOT = Director of Technology



TIPS FY16 Proposal Selection Process Timeline

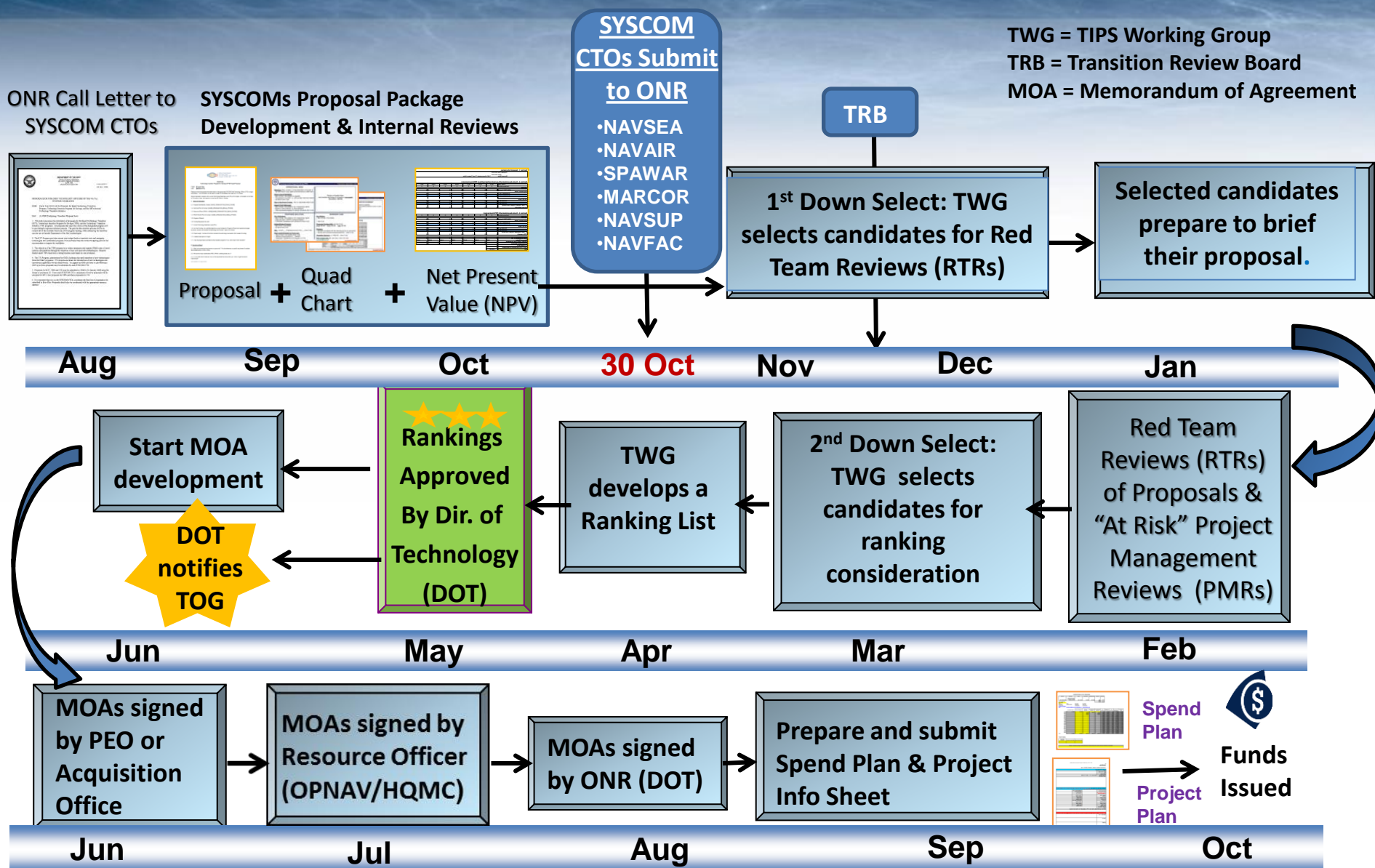
- | | |
|--|----------------|
| 1. ONR's Call Letter to SYSCOMs | 1 Aug 2014 |
| 2. SYSCOMs Proposal Development / Internal Reviews | Aug-Oct 2014 |
| 3. SYSCOMs submit proposals to ONR | 30 Oct 2014 |
| 4. 1 st Down Selection by TWG | Early Dec 2014 |
| 5. Red Team Reviews | 1-28 Feb 2015 |
| 6. 2 nd Down Selection by TWG for Ranking Consideration | Late Mar 2015 |
| 7. Submit Individual Rankings for Consolidation | Late Apr 2015 |
| 8. Prioritize Proposals for Ranking Recommendations | Late Apr 2015 |
| 9. ONR's Director of Technology (DOT) Approval | Early May 2015 |
| 10. MOAs Signed by PEO / Resource Officer / ONR 03T | May-Aug 2015 |
| 11. Spend Plan Preparation and Submittal | Early Sep 2015 |
| 12. FY16 Funding Issued | Oct 2015 |
| 13. Projects Begin Executing | |

TOG	Technology Oversight Group
TWG	TIPS Working Group
■	TWG Participation with Science Advisor (SA) Inputs
■	SYSCOM (Submitter) Participation
■	TWG, SAs & SYSCOM (Submitter) Participation



Roadmap for FY16 TIPS Reviews & Selection Processes

TWG = TIPS Working Group
TRB = Transition Review Board
MOA = Memorandum of Agreement

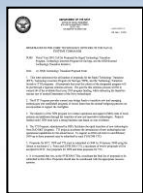




TIPS Process Document Trail

(Submission, Post Selection, Execution, & Transition)

ONR Call Letter



**SYSCO
M CTOs**

- NAVSEA
- NAVAIR
- SPAWAR
- MARCOR
- NAVFAC
- NAVSUP

Industry

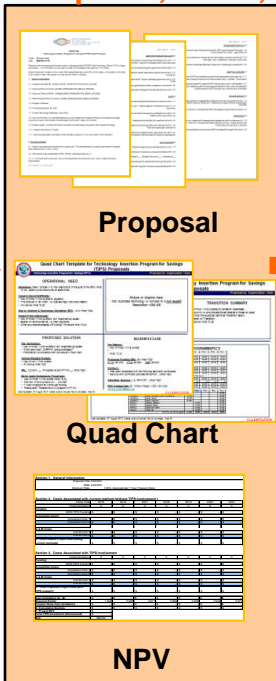
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DoD Labs

-
Warfare Centers

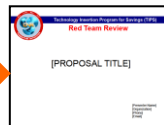
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PORs

Step 1: Submission Reviews

Proposal, Quad, NPV

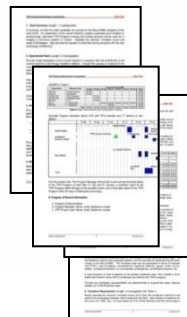


RTR Brief



Step 2: Post Selection

MOA



Spend Plan

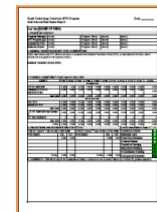


Project Plan

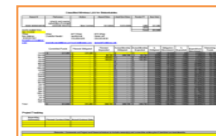


Step 3: Execution

SADR

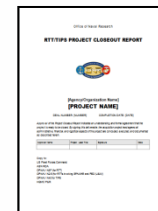


Quarterly Spend Plans



Step 4: Transition

Close Out Report



Success Story



<http://www.onr.navy.mil/Science-Technology/Directorates/Transition>



SYSCOM POCs for TIPS

<u>NAVSEA:</u>	Steve Southard	Steven.southard@navy.mil
<u>NAVAIR :</u>	Todd Parcel	john.parcell@navy.mil
<u>SPAWAR:</u>	Dr. Bob Parker	robert.parker@navy.mil
<u>NAVFAC:</u>	Phil Vitale	philip.vitale@navy.mil
<u>NAVSUP:</u>	Mark Deebel	mark.deebel@navy.mil
<u>MARCOR:</u>	John Stroud	john.m.stroud@usmc.mil



TIPS Contractor Support Team

Prime Contractor: **American Technology Solutions International (ATSI) Corp.**

Transition Coordinators:

TIPS APM/NAVFAC/

NAVSUP:

Calvin Reddick

calvin.reddick@atsi.co

NAVSEA:

Joe Piff

jpiff@mcri.com

NAVAIR/MARCOR:

Allan Orr

aorr@mcri.com

SPAWAR:

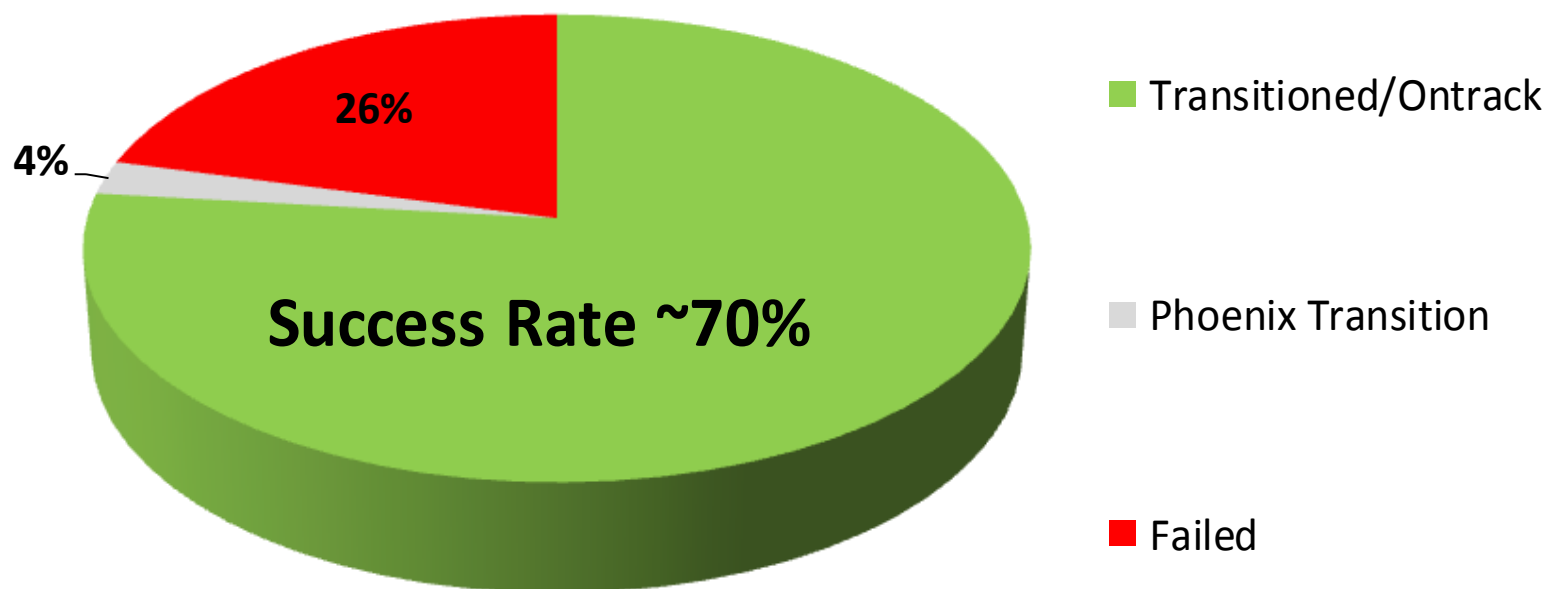
Patrick Mulvihill

patrick.mulvihill.ctr@navy.mil



TIPS Performance Metrics

TIPS Performance as of March 2014



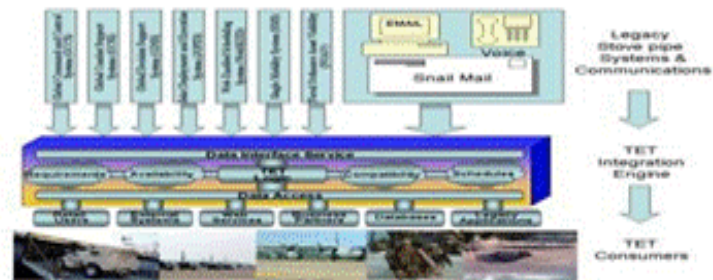
Average ROI Transitions (FY10-FY14) 16:1



Areas of Opportunity for Reducing Costs to DoN

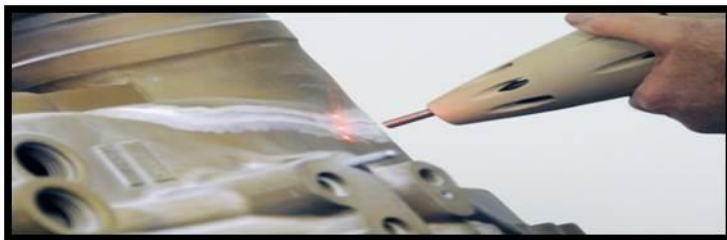
- Replace older near obsolete components with more reliable and less expensive components
- Improve operational & repair processes to increase mean time between failures that will reduce time spent with repairs.
- Test new materials & protective coatings that reduce rust, corrosion and maintenance costs due to corrosive damage to components and platforms
- Automate processes to improve performance
- Increase human and environmental safety factors
- Improve quality of life for our warfighters

Success Stories



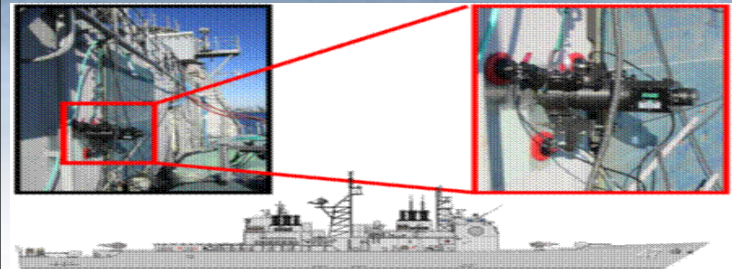
Transportation Exploitation Tool (TET)

Will enable NAVSUP GLS to reduce the planning cycle time required to identify, assess, coordinate, and execute transportation opportunities to accommodate critical delivery timelines. Cost Savings/Avoidance > \$77m through 2020



H-1 Combining Gearbox Chaffing Repair via Cold Spray

Cold Spray repairs chafing damage on the combining Gearbox external housing extending the life vice having to be scrapped and replaced at significant cost. Cost Savings/Avoidance > \$18M through 2020



Naval Superstructure Cracking Due to Aluminum Sensitization

Will reduce cost by streamlining maintenance decisions associated with aluminum crack repair. Cost Savings/Avoidance > \$76m through 2018.



Modified Atmosphere Packaging System (MAPS)

Extend service life of fresh fruit and vegetables aboard US Navy ships. Cost Savings/Avoidance > \$3m through 2016



FLAG RECOGNITION OF THE TRANSPORTATION EXPLOITATION TOOL (TET)



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
COMMANDANT FOR MISSION SUPPORT (20593-7243)
COMMANDANT FOR INSTALLATIONS AND LOGISTICS
2000 NAVY PENTAGON
WASHINGTON, DC 20350-2000

OPNAV N4
4600
Ser N4

DCMS
4600
Ser

IN REPLY REFER TO
DC I&L
4600
Ser/
MAY 20 2013


JOINT LETTER

From: Deputy Chief of Naval Operations, Fleet Readiness and Logistics
Deputy Commandant, Mission Support, USCG
Deputy Commandant, Installations and Logistics

To: Chief of Naval Research

Subj: OFFICE OF NAVAL RESEARCH (ONR) SUPPORT OF TRANSPORTATION
EXPLOITATION TOOL (TET) DEVELOPMENT

1. During the most recent Naval Logistics Integration Service Logistics Chiefs Board, we were briefed on the status of TET development by Naval Supply Systems Command Global Logistics Support, Norfolk. The brief highlighted ONR's support for the initiative.
2. In this time of diminishing fiscal resources, we continually look for new and innovative ways to improve efficiencies and effectiveness. Since 2010, use of the TET program to identify underutilized transportation opportunities has resulted in more than \$27M in documented cost avoidances, a tremendous accomplishment highlighting ONR's efforts paying dividends. Expansion of the TET user base and full implementation of the tool will undoubtedly result in even larger cost avoidance opportunities and increase transportation effectiveness. The future of TET is bright.
3. These impressive transportation results wouldn't be possible without ONR's sizeable investment and commitment to fund and develop TET. Thank you for your support, we ardently recommend continued investment.


Philip Cullom
VADM USN
DCNO (FR&L)


Manson Brown
VADM USCG
DCMS


W. M. Faulkner
LtGen USMC
DC I&L

Copy to:
NAVSUP
DMCS
DC I&L



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Transportation Exploitation Tool (TET)

Greg Butler
NAVSUP WSS
Division Director
Fleet Movement & Systems Support
4 Feb 2015



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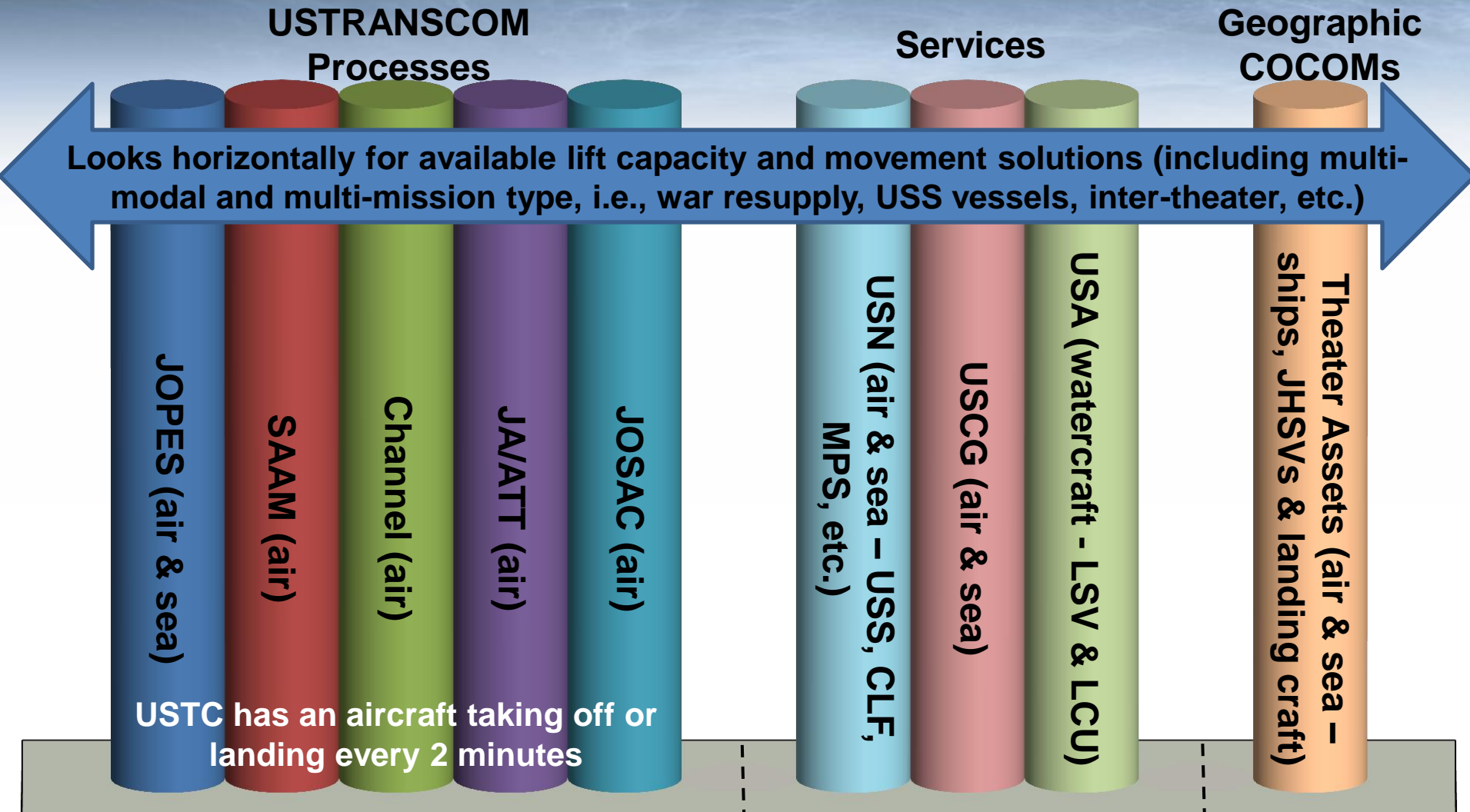


Foundation, Function & Impact

- SECNAV Naval Logistics Integration Initiative
- Sponsorship from 3-star naval Service Log Chiefs
- SECRET and UNCLASSIFIED
- First-ever Kayak©-like capability in DoD
- Connects unrelated flight and ship schedules
- Solves urgent and complex transportation problems
- Creates conveyance and cost efficiencies
- \$41.5M in cost avoidance / 388% ROI



Why TET is Successful



We don't care why the conveyance is moving, only that we can see it



Enabling Success Through TIPS

- ONR TIPS Program (x 2)
 - Critical to initial TET dev and mission accomplishment
 - Professional, reliable and focused on success
 - TIPS I:
 - Delivered first-ever UNCLASSIFIED PoR
 - Live USTRANSCOM aircraft scheduling data
 - TIPS II:
 - Enhanced SECRET transportation analysis: Web Services, Cloud enabling, Intelligent Agents
 - Reducing planning days/weeks to seconds/minutes



TET Path Forward

- Establish SECRET TET as NAVSUP PoR in FY15
- Nominated for TIPS III (Dynamic Replanning)
- Continue adding game-changing capabilities
- Stay ahead of change -- TIPS is **CRITICAL**
 - Sequestration and budget reductions
 - Demand signal (increasing)
 - Environment (Pivot to Pacific, Islamic State, Ebola, etc.)



DEMO



Transportation Exploitation Tool (TET) (Cont...)

Q&A